



Multnomah  
County

## Contact the Weatherization Program

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**TRS**

711 (Transfer Relay Service)



[multco.us/weatherization](http://multco.us/weatherization)



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# ENERGY EDUCATION



*Common myths, quick energy facts,  
household maintenance and more.*



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## Common myths

### New windows help save on heating bills.



Windows are poor insulators regardless if they are new or old, and they feel drafty due to air movement inside the home. Other upgrades should be considered before replacing windows.

### Closing heat vents saves energy.



Closing a vent actually increases duct leakage to outside the living space and increases energy use from the furnace blower motor.

Also, condensation and mold growth increases in winter due to lower surface temperature in rooms with closed vents.

### Setting a thermostat higher heats the room faster.



The air from a heater is only one temperature regardless of thermostat settings. Setting the thermostat at a desired temperature will heat the house just as fast as a higher setting without having to reset the thermostat.

### Heating with a fireplace saves money.



Fireplaces are designed to pull air out of the home, so more than half the heat from a fireplace goes out the chimney. Wood stoves are better than fireplaces but not by much.

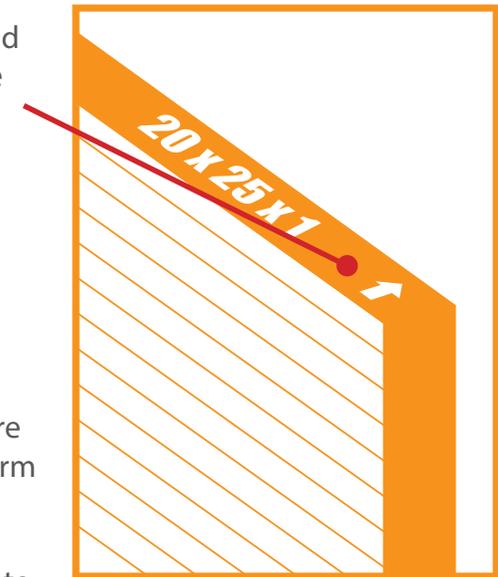
## Changing a furnace filter

### Step 1

Learn where your furnace filter is and check it monthly. Look at it through the light. If it does not let light through and/or has a thick layer of dust on it it's time to replace it.

### Step 2

Find the filter size and air flow arrow on the side of the filter.



### Step 3

Follow the manufacturer's maintenance instructions. If you are unsure how to perform the maintenance, or are unable to do so, consult an appropriate professional.

Having a filter with high MERV rating puts a strain on the furnace and reduces airflow. The furnace may overheat and be louder as a result. Installing a filter with a MERV rating of 8 is recommended.

## Furnace filter FAQ



### **I have a reusable filter that I wash or hose down. Is this adequate?**

Reusable filters are okay, but disposable filters are likely to be better at filtering small particles.

### **I have an electronic air filter that makes a zapping noise once in a while. Am I protected?**

They aren't effective for removing particles out of the air. You can save energy and protect your house better if you switch to disposable filters.

## Common myths

### **Energy efficient electric space heaters saves money.**



All electric heaters cost the same to run regardless of claim or style. Baseboard/cadet heaters are just as efficient as space heaters. All energy used is converted to heat. Heating with a heat pump or gas furnace is more cost efficient than any electric heater.

### **No need to insulate floors because heat rises.**



Air enters the house from the lowest point so insulating the home top to bottom can reduce energy consumption.

### **Keeping the ceiling fan on cools the room.**



A fan stirs the air in the room but does not cool or heat it. You should only use a fan in a room when you are there.

### **A house needs to breathe.**



This is an old way of thinking that can be replaced with a new saying: Seal tight and ventilate right. Studies have shown that tightening a house and including proper ventilation is the best tactic for energy efficiency.

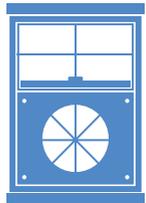
## Quick energy facts

### Dryer tips to cut down on cost



- Use the automatic setting if you have it, as it will shut down the dryer automatically when your clothes are dry.
- Add dryer balls to help stir up the clothing and dry faster. Another method for drying your clothes faster is to add a clean, dry towel in the load.
- Run your dryer on low heat and run it for longer.

### Air conditioning units differ



Window mounted air conditioning units are more energy efficient than portable, freestanding air conditioning units.

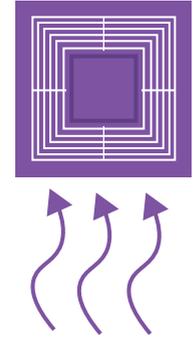
Freestanding AC's take air from your house and blow it outside to get rid of the heat.

That causes the same amount of hot air to come into your house from the outside. A window AC doesn't draw outside air into your house.

If you are looking for a more efficient portable AC unit just be sure to seek a model that has not one, but two air ducts going to the outside.

## Fan maintenance

The most important maintenance to do on your new ventilation bath fan is to clean it when it gets dirty.



A good sign that it's time to clean it is when you notice accumulation of dust on the exterior of the grill. In most cases cleaning the fan twice a year is enough. If bath fan is exposed to hair spray use, it may need to be cleaned more often.

Refer to the owner's manual how to maintain the bath fan.

### Why maintenance is important

The purpose of the fan is to maintain air quality and reduce the likelihood of mold growth.

After your house is weatherized it should be tighter. While this is good because it holds heat better, it may also hold more moisture and raise the humidity. The fan should move just enough air to keep a healthy environment.

### Ventilating your home is worth it

Many people are worried that having a bath fan running all the time is costly. In reality it's been shown that it costs less than \$3/month. In most cases the fan works at a low speed which costs even less. Ventilating brings in healthier air and contributes to your well-being, which far outweighs the minimal cost of operation.

## Healthy Home

The amount of money saved through reduced health care cost may exceed energy savings through weatherization. This is especially applicable to people with asthma and other at risk groups.

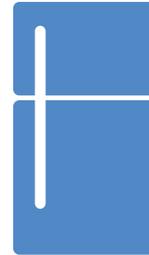
### The 8 principals to a healthy home

1. **Keep it Dry.** The humidity in your home should be 35-55%. When the humidity is above 60% you are more likely to have mold grow in your home.
2. **Keep it Clean.** Take off shoes when entering the house and use a doormat to wipe shoes when entering.
3. **Keep it Pest Free.** Try not to leave food out to attract pests in the home.
4. **Keep it Safe.** Avoid tripping hazards.
5. **Keep it Contaminant Free.** Don't use "air fresheners" or add scents to the house.
6. **Keep it Ventilated.** Having a ventilated home can reduce the likelihood of mold growth.
7. **Keep it Maintained.** Watch for water intrusions, wood rot, or paint chipping.
8. **Keep it Thermally Controlled.** Maintain the lowest comfortable temperature while inspecting for mold growth.



## Quick energy facts

### Use refrigerator and freezers efficiently.



- Vacuum coils ( behind and/or underneath units) at least twice yearly.
- Consolidate food and eliminate the need for additional refrigerators or freezers.
- Set refrigerator temperature between 35-40 degrees and freezer around 0-3 degrees.

### Turn off unnecessary lighting.



Inside and outside the home use LED (light emitting diode) bulbs. They use less than 15% of the energy of old style incandescent light bulbs.

### Reduce hot water use.



Five to 10 minute showers use less energy than baths. Try shortening your showers by a few minutes. Install low flow shower heads and faucet aerators, if you don't already have them. Run your clothes washer and dishwasher only when full. Wash clothes in cold water as most modern clothes detergents are designed for cold water.

## Carbon monoxide safety

Any of these can produce carbon monoxide that can kill or make people ill.



## Carbon monoxide safety

### What you can do:

- Make sure you have functioning carbon monoxide and smoke detectors that are less than 10 years old.
- Use professionals to ensure your furnace and water heater are properly vented.
- If you have a gas range and oven make sure you have an exhaust fan that vents to outside, and use it whenever range and oven are in use.
- Do not use any combustion appliances in your home that are not vented, such as ventless fireplaces and propane space heaters.
- If your fireplace or wood stove is letting some smoke into the house stop using it and have a professional assess and fix the venting.
- Never use generators inside your home.
- Don't let vehicles idle inside your attached garage.